AMENDMENTS TO THE CLIAMS

Claim 1 (original): A batch processing apparatus for creating desired output data based on arbitrary input data comprising:

a metadata acquisition section for acquiring from a predetermined memorizing section, metadata defined as information concerning at least data item name, input, processing operation content, and output, as well as information previously stored in the memorizing section;

a data input section for inputting the input data based on a declaration process of the metadata acquired through the metadata acquisition section;

a processing section for creating the output data by processing the input data input through the data input section, based on the declaration process of the metadata acquired through the metadata acquisition section; and

a data output section for outputting the output data created by the processing section, based on the declaration process of the metadata acquired through the metadata acquisition section,

wherein the processing section changes and creates all of the output data related to the metadata, according to change of the metadata.

Claim 2 (original): The batch processing apparatus according to claim 1, wherein the processing section includes a summary operation processing section for performing a summary operation process produced in a case of creation of summary data, a specific operation processing section for performing a specific operation process produced in a case of creation of specific data, a group operation processing section for performing a group operation process defined as a group calculation with respect to a parent-child relationship existing in the input data, and a time-series operation processing section for performing a time-series operation process for updating time-series data.

Claim 3 (currently amended): The batch processing apparatus according to claim 1 or claim 2, wherein the metadata expresses a data item of the input data, a format of the input data, a category expressed with a code in a case of the data item having the code, a category

hierarchy configured with a combination of the categories, a data item of the output data, a format of the output data, a management unit for expressing an output unit of the output data with the data item as a factor, an extraction condition expression expressed with data item of the input data as a factor, a derivation operation expression for expressing the output data derived based on the data item of the input data, a code conversion content and a code conversion method for converting a value of the data item of the input data into a code of the output data, the data item of the input data and a calculation method for identifying the parent-child relationship for the group operation on the parent-child relationship, a term indicating comparison with a time point expressed as a factor of the data item name of the output data to be output in the time-series operation, and/or a method for correcting past time-series in a case of the input data being past correction data.

Claim 4 (currently amended): The batch processing apparatus according to claim 1 or claim 2, wherein the metadata express a process flow of the batch process, a content of intermediate data created in each process, and/or a link between the input data and the output data in each process.

Claim 5 (original): A batch processing method for creating desired output data based on arbitrary input data comprising:

a metadata acquisition step for acquiring from a predetermined memorizing section, metadata defined as information concerning at least data item name, input, a processing operation content, and output, as well as information previously stored in the memorizing section;

a data input step for inputting the input data based on a declaration process of the metadata acquired at the metadata acquisition step;

a processing step for creating the output data by processing the input data input at the data input step, based on the declaration process of the metadata acquired at the metadata acquisition step; and

a data output step for outputting the output data created at the processing step, based on the declaration process of the metadata acquired at the metadata acquisition step,

wherein all of the output data related to the metadata are changed and created according to change of the metadata at the processing step.

Claim 6 (original): A batch processing program executable with a computer, for creating desired output data based on arbitrary input data comprising:

a metadata acquisition process for acquiring from a predetermined memorizing section, metadata defined as information concerning at least data item name, input, a processing operation content, and output, as well as information previously stored in the memorizing section;

a data input process for inputting the input data based on a declaration process of the metadata acquired in the metadata acquisition process;

a processing process for creating the output data by processing the input data input in the data input process, based on the declaration process of the metadata acquired in the metadata acquisition process; and

a data output process for outputting the output data created in the processing process, based on the declaration process of the metadata acquired in the metadata acquisition process,

wherein all of the output data related to the metadata are changed and created according to change of the metadata in the processing process.

Claim 7 (original): A batch processing system for creating desired output data based on arbitrary input data comprising:

a memorizing device for previously memorizing and registering metadata defined as information concerning at least data item name, input, a processing operation content, and output;

a first operating device for creating the metadata based on a predetermined specification, registering the created metadata in the memorizing device;

a processing device for acquiring the metadata from the memorizing device, inputting the input data based on a declaration process of the acquired metadata, creating the output data by processing the input data already input, and outputting the output data; and

a second operating device for giving at least a start instruction of a batch process to the processing apparatus,

wherein the processing apparatus changes and creates the output data related to the metadata according to change of the metadata.

Claim 8 (new): The batch processing apparatus according to claim 2, wherein the metadata expresses a data item of the input data, a format of the input data, a category expressed with a code in a case of the data item having the code, a category hierarchy configured with a combination of the categories, a data item of the output data, a format of the output data, a management unit for expressing an output unit of the output data with the data item as a factor, an extraction condition expression expressed with data item of the input data as a factor, a derivation operation expression for expressing the output data derived based on the data item of the input data, a code conversion content and a code conversion method for converting a value of the data item of the input data into a code of the output data, the data item of the input data and a calculation method for identifying the parent-child relationship for the group operation on the parent-child relationship, a term indicating comparison with a time point expressed as a factor of the data item name of the output data to be output in the time-series operation, and/or a method for correcting past time-series in a case of the input data being past correction data.

Claim 9 (new): The batch processing apparatus according to claim 2, wherein the metadata express a process flow of the batch process, a content of intermediate data created in each process, and/or a link between the input data and the output data in each process.